



TOOLS OF THE MIND

METROPOLITAN STATE
COLLEGE of DENVER

Pre-K

Preschool



Welcome Parents, to *Tools of the Mind*!

Your program or school district is investing in children by providing the *Tools of the Mind* curriculum. Your child has a wonderful year ahead!

What makes a Tools classroom unique?

→ **Focus on self-regulation**

Current research shows that self-regulation (both cognitive and social-emotional) has a stronger association with school readiness than IQ or entry-level reading or math skills. Good self-regulation includes the ability to stay on task, ignore distractions, and hold two strategies in mind at the same time, as well as the development of self-discipline and the motivation to succeed. Aspects of self-regulation such as the ability to pay attention, remember on purpose, plan one's actions, reflect on one's thinking, and cooperate and act empathetically toward peers, heavily influence a child's future success in school. Inadequate self-regulation is associated with discipline problems and poor social adjustment.

Helping young children improve their self-regulation is critical to closing the achievement gap for many at-risk children, as well as helping all children reach their highest potential.

“A growing body of research indicates that a lack of self-regulation may be the root cause of many children's lack of school readiness.”

The central focus of Tools of the Mind (Tools) is the development of both cognitive and social-emotional self-regulation at the

same time that academic skills are taught. In a Tools preschool:

- Practice in self-regulated learning is embedded into all activities.
- Teachers use strategies to help children improve the quality of their dramatic make-believe play so it fosters self-regulation development.
- Research-based literacy and math activities are modified to include self-regulatory components.
- Specific instructional activities are designed to teach self-regulation and reflective thinking.
- Classroom management techniques maximize time-productive interactions and task involvement.



How does self-regulation develop in a preschooler?

Mature intentional make-believe play is the foundation of self-regulation development. It creates conditions in which young children are able to act in a more mature way and use more mature mental functions. Children remember more, attend better and have better self-regulation. This kind of play is the only classroom experience that naturally provides the three types of interactions which lead to self-regulation: regulation by others, regulation of others and self-regulation. Without deliberate scaffolding by teachers providing on going opportunities to engage in mature play, many young children will not develop it on their own.

In Tools of the Mind, there is explicit design of literacy, mathematics and science activities so that they further promote the self-regulation developed in play. This means that children act in a regulated way in a variety of instructional contexts in school, and have increased ability to be regulated in other settings as well.

What are the activities in the Tools Pre-K classroom like?

Activities are multi-level, capable of meeting the needs of children from 2 ½ to 5. Each child is challenged and supported at his or her own level. Teachers learn how to scaffold children with diverse needs within the same activity. Tools activities grow along with the children, increasing in challenge level and complexity as the year progresses.

Tools Activities use a number of different participation styles and grouping formats. Some are large or small group activities, and in others, children work with 'buddies.' Teachers are deliberate in partnering children with every other child in the classroom over time, building a strong and positive classroom community. Community Building Activities are built into Tools, as are special Attention Focusing Activities. Children are encouraged to 'talk to think' and talk to a partner or respond chorally in many activities to support high-level engagement in learning. Activities are fun - children learn by playing games and by drawing and writing in activities that are designed to support their engagement and development.

Mature intentional play has the following characteristics:

- Supports expressing and representing intention through play planning
- Has explicit roles and implicit rules
- Uses symbolic props
- Has an extended time frame
- Includes extensive use of language
- Involves an imaginary pretend scenario.



Examples of Tools Pre-K Activities

Graphics Practice

In Graphics Practice, children develop the fine motor and self-regulation skills needed for writing. They draw on white boards with markers, stopping and starting in response to musical cues. Children use private speech to help them remember how and what to write, learning to inhibit while also remembering the shape they're representing in writing.

Buddy Reading

In Buddy Reading, pairs of children "read" books to each other, using external mediator cards to remind them of their roles as they take turns reading and listening. Buddy Reading is one of Tools of the Mind's cooperative partner activities. These activities are designed to foster self-regulation development and positive child-child interaction while also fostering the development of emergent literacy or numeracy skills.

Venger Drawing

In small groups, teachers help children plan and discuss various ways to incorporate a geometric shape into a drawing. Children use geometric terms and positional vocabulary, brainstorming possibilities from multiple perspectives. Children each verbalize a plan for their drawing and create a unique representation incorporating the geometric shape.

Play Planning

Children describe what they are going to do when they play and then represent their plan on paper in drawing and writing. Children work at their own level, adding detail to their drawn plans, using lines to represent words in their written message, and using the Tools of the Mind Sound Map to write letters representing the sounds in their words.

Making Collections

In Making Collections, children work in a cooperative partnered mathematics activity taking turns counting and 'checking' using one-to-one correspondence.



▲ What is a typical Tools Pre-school day like?

- Children begin the day by solving a 'Mystery' - in the beginning of the year, answering a 'Mystery Question' and by the end of the year, solving mysteries involving numbers, shapes, patterns, letters, letter sounds and rhyme.
- Children gather together for an Opening Group and engage in activities that support their awareness of concepts print and letter sounds, build positive relationships with peers, develop oral language skills, and mathematics understandings in fun activities like Share the News, Timeline Calendar, Weather Graphing and Message of the Day.
- Throughout the day children engage in Attention Focusing Activities, Community Building Activities and Self-Regulation Activities.
- Every day children engage in make-believe play, choosing one center and planning their play orally, in drawing and using Scaffolded Writing as they are ready.
- Children engage with their teacher in 'Make-Believe Play Practice' building strong make-believe skills, leading to higher-level play and greater self-regulation development.
- Children engage in both small and large group 'Story Labs' building comprehension skills
- Children do 'Buddy Reading' or 'Graphics Practice'
- Children engage in small group and partnered math and science activities
- Children rest, eat snack, play outside, engage in free play--- have fun!

■ Parent Involvement

How can I support self-regulation development at home?

- Support make-believe play at home; make 'props' available and a space for pretend play. Take your child on 'field trips' to local places in the community to 'study' for play!
- Use the Tools approach to 'transitions' -- engage your child in pretending. When it's time to leave the playground, or brush teeth, suggest that your child (and you!)... 'pretend to be giant elephants, swinging our trunks like this. . ." as you move toward the destination!"
- Invite friends over, and support your child's play with other children.
- Give your child a 'tool' to stay regulated during 'wait times' -- learn songs and fingerplays from the classroom and begin singing or saying these whenever your child is waiting.
- Have your child set a timer with you to ring when TV time is over, or it's time to go to bed. When it goes off, it's ____ time (because the timer says so--not you!)
- Play games like 'Simon Says' which require children to 'inhibit' acting - to think and deliberately *not* do something.
- Play simple 'memory' games to build working memory -- put a few favorite toys or food items on the table and ask your child to say the names of each to 'help you remember.' Then cover the toys and take something away or change the order. See if your child can remember and tell you what changed!
- Read storybooks together; read favorites many times. Let your child begin to 'tell' what happens next when you turn the page; soon your child can 'read' the story to you!
- Encourage children to 'talk' when they are engaged in challenging tasks - saying aloud the steps in getting dressed, talking about how to find the next puzzle piece. This kind of self-talk supports concentration, sustained effort and success!

For more information, please visit our website at
www.toolsofthemind.org

National and International Recognition

U N E S C O

In 2001, the International Bureau of Education, an arm of the United Nations Educational, Scientific and Cultural organization (UNESCO), named Tools an exemplary innovative educational program.

O t h e r s

Footage showing Tools classroom activities can be seen in the "Heads-up Reading" television series and the "Growing and Learning in Preschool" video produced by the National Institute for Early Education Research (NIEER). Scaffolded Writing, a technique invented by Tools to teach writing, has been named as a model literacy technique by the International Reading Association.

How can I contribute to my child's Tools Preschool experience?

- Contribute theme-based props to the classroom
- Make play dough for the classroom
- Take photos of your family in different 'role' contexts, and people working in roles in the community to support make-believe play
- Look at your child's play plans and talk with your child about them
- Ask your child to 'show you' how to play in the current play theme; what does a 'doctor' say or do? What should I do as the 'patient'?
- Communicate regularly with your child's teacher. Ask questions! Share your observations of play and self-regulation development!
- Know that your child, and your child's teacher are grateful for your participation!



Characteristics of Tools of the Mind

- Tools is a comprehensive curriculum, including content that meets all state and national standards. Content is presented in an integrated, developmental way so that instruction forms a coherent whole.
- Instructional strategies used in Tools are a combination of child-initiated activities, teacher scaffolding and explicit instruction, individualization through multiple levels of scaffolding and on-going use of assessment data to tailor interactions to meet individual needs. Progress is monitored daily, weekly and monthly.
- ▲ The instructional formats and activities in Tools are research based.

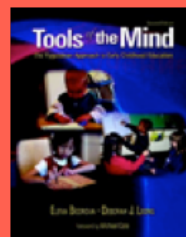


How Tools is implemented

- Tools is designed as a core curriculum that works for all children including those with identified special needs.
- Tools activities are multi-level so instruction is individualized within the design of each activity. Ability grouping is not used to individualize instruction.
- ▲ Specific scaffolds for children with special needs as well as those who are non-English speakers (ELL) are written into each activity.
- Specialized training is given to ensure that classroom teachers and special needs staff can work together in a coordinated manner.
- Tools is designed to be implemented in both full- and half-day preschool programs with a teacher and one part-time or full-time paraprofessional, depending on class size.
- ▲ Alignments are developed that ensure that instruction matches end-of-the-year district benchmarks and standards.

How can I learn more?

To learn more about Tools of the Mind, look for the Tools of the Mind book →



Evidence of Effectiveness

Children in Tools were found to have higher rates of self-regulation in a National Institute for Early Education Research (NIEER) double-randomized study. This study compared children in Pre-K Tools classrooms with a control group using a high-quality ECE program with no emphasis on self-regulation. In addition to student gains, teachers trained in Tools scored higher in classroom management measures, used classroom time more productively and had a higher rate of appropriate and cognitively challenging interactions, as measured by the Early Childhood Environmental Rating Scale and the CLASS.

A follow-up quasi-experimental study using classrooms from the NIEER study compared the self-regulation/executive function levels of children in Tools Pre-K classrooms with a group of matched controls who did not attend Tools. The study found higher levels of executive function/self-regulation as measured on neurocognitive tests (University of British Columbia Medical School). Student levels of self-regulation were correlated with achievement levels on standardized tests (Woodcock Johnson, Peabody Picture Vocabulary test).

Early childhood programs that have implemented Tools of the Mind report higher literacy and math scores and fewer incident reports, discipline problems and special education referrals. Teachers report children are able to stay involved in activities, pay better attention and remember better. Teachers report fewer classroom management problems and improved ability to individualize for students.



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